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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/815,933	03/23/2001	Peter A. Graef	WEYC116969	7554
26389	7590 05/27/2004		EXAMINER	
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE			BOYD, JENNIFER A	
SUITE 2800			ART UNIT	PAPER NUMBER
	SEATTLE, WA 98101-2347		1771	

1771
DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
_	09/815,933	GRAEF ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jennifer A Boyd	1771					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	ldress				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	id(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered time the mailing date of this o O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 15 M	<u>arch 2004</u> .						
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) <u>1-79 and 108</u> is/are pending in the ap							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-79 and 108</u> is/are rejected. 7)□ Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement						
o) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examine	:						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P	ГО-152.				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents	have been received.	· · · · · ·					
2. Certified copies of the priority documents							
<ol> <li>Copies of the certified copies of the prior application from the International Bureau</li> </ol>		d in this National	Stage				
* See the attached detailed Office action for a list of	•	d.					
	•						
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) ☐ Notice of Informal Pa		D-152)				
Paper No(s)/Mail Date <u>3/15/04</u> .	6)  Other:	•	•				

### **DETAILED ACTION**

# Response to Amendment

- 1. The Applicant's Amendments and Accompanying Remarks, filed March 15, 2004, have been entered and have been carefully considered. Claim 108 is added, claims 80 - 107 are canceled and claims 1-79 and 108 are pending. The invention as currently claimed is not found to be patentable for reasons herein below.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 103

3. Claims 1 - 16, 20 - 25, 32 - 53, 62 - 69 and 71 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Wanek et al. (U.S. 5,294,478) in view of Ruffo (US 4,018,646). The details of the rejection can be found in paragraph 3 of the previous Office Action dated December 1, 2003. The rejection is maintained.

Newly added claim 108 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Wanek et al. (U.S. 5,294,478) in view of Ruffo (US 4,018,646).

Wanek is directed to a multi-layer absorbent composite which is useful in personal care products (column 1, lines 5-9). Wanek teaches an absorbent composite comprising first and second surge management layers and an absorbent layer located between said first and second surge management layers (Abstract). The first and second surge management layers are equated to the Applicant's "first stratum" and "third stratum" respectively and the absorbent layer is

equated to the Applicant's "second stratum". Wanek teaches that the first surge management layer comprises synthetic polymeric fibers, which can be equated to the Applicant's "first fibers", and the second surge management layer comprises hydrophilic fibers, which can be equated to the Applicant's "third fibers" (Abstract). The absorbent layer comprises a means for containing a high-absorbency material and a high-absorbency material (column 6, lines 51 - 54). In one preferred embodiment, the absorbent layer is formed from an air-laid mixture of wood pulp fluff fibers, equated to the Applicant's "second fibers", and a high-absorbency material such as synthetic hydrogel polymers, equated to the Applicant's "superabsorbent material" (column 7, lines 1 - 15, column 10, lines 19 - 24).

Wanek fails to disclose a first transition zone comprising fibers from the "first and second strata" and a second transition zone comprising fibers from the "second and third strata" commingled substantially uniformly across the composite's width and along the composite's length.

Ruffo is directed to a nonwoven useful in applications such as absorbent products such as diapers (column 15, lines 1-10). Ruffo teaches a nonwoven material comprised of a majority amount by weight of a fiber type and a minority amount, by weight of a second fiber type interspersed and blended therewith with the opposed major face being comprised of a majority amount by weight of a second fiber type and a minority amount of the first fiber type and blended therewith (column 11, lines 48-55). In a preferred embodiment, Ruffo teaches a substantially continuous fiber transition zone between each opposed face, substantially uniformly diminishes on a weight basis to the other face at which it comprises a minority amount of the fiber blend by weight (column 11, lines 62-68). It is not stated explicitly by Ruffo but it is

recognized in the art that this type of fiber commingling also adds structural integrity to the bonded layers, helps resist delamination of the two layers and provides enhanced wicking of fluids.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to uniformly intersperse and blend the fibers of the first surge management layer with the fibers of the second surge management layer of Wanek to create a first transition zone as suggested by Ruffo and blend the fibers of the second surge management layer with the fibers of the third surge management layer of Wanek to create the second transition zone as suggested by Ruffo motivated by the desire to create a laminate with more structural integrity as well as providing enhanced wicking of fluids.

It should be noted that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or an obvious variant from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the Applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

4. Claims 17 and 18 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Wanek et al. (U.S. 5,294,478) in view of Ruffo et al. (US 4,018,646) and Win et al. (U.S.

5,677,635). The details of the rejection can be found in paragraph 4 of the previous Office Action dated December 1, 2003. The rejection is maintained.

- 5. Claims 27 31, 55 61, 70 and 72 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wanek et al. (U.S. 5,294,478) in view of Ruffo et al. (US 4,018,646) and Graef et al. (US 5,225,047). The details of the rejection can be found in paragraph 5 of the previous Office Action dated December 1, 2003. The rejection is maintained.
- 6. Claims 74 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wanek et al. (U.S. 5,294,478) in view of Ruffo et al. (US 4,018,646), Graef et al. (U.S. 5,225,047) and Gilman et al. (U.S. 5,437,653). The details of the rejection can be found in paragraph 6 of the previous Office Action dated December 1, 2003. The rejection is maintained.

#### Response to Arguments

- 7. Applicant's arguments filed March 15, 2004 have been fully considered but they are not persuasive.
- 8. In response to Applicant's argument that Wanek teaches away from a composite having a transition zone between adjacent layers, the Examiner respectfully argues the contrary. Wanek teaches an absorbent composite comprising first and second surge management layers and an absorbent layer located between said first and second surge management layers (Abstract).

  Although Wanek fails to disclose a first transition zone and a second transition zone comprising

fibers commingled substantially uniformly across the composite's width and along the composite's length, Ruffo teaches a nonwoven material comprised of a majority amount by weight of a fiber type and a minority amount, by weight of a second fiber type interspersed and blended therewith with the opposed major face being comprised of a majority amount by weight of a second fiber type and a minority amount of the first fiber type and blended therewith (column 11, lines 48 - 55). In a preferred embodiment, Ruffo teaches a substantially continuous fiber transition zone between each opposed face, substantially uniformly diminishes on a weight basis to the other face at which it comprises a minority amount of the fiber blend by weight (column 11, lines 62 - 68). Although, it is not stated explicitly by Ruffo but it is recognized in the art that this type of fiber commingling also adds structural integrity to the bonded layers, helps resist delamination of the two layers and provides enhanced wicking of fluids. Therefore, it is the position of the Examiner that Ruffo properly provides for deficiencies of the invention Wanek. The Applicant notes that Wanek states "it is not necessary that the first and second surge management layers be in direct contact with an absorbent layer" (column 6, lines 40 - 45) but it should be noted that Wanek does not necessarily teach that they are **NOT** in direct contact. Wanek simply provides flexibility in his invention by allowing intervening layers but does exclude an embodiment where the first and second surge management layers are in direct contact with the absorbent layer. Further, the Applicant notes that the layers are plied which is disclosed by the Wanek reference. However, the Examiner has used Ruffo to provide motivation for commingled transition zones, therefore, the end result of the combination of the two references would not be a plied composition. It should be noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

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See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

9. In response to Applicant's argument that the interfaces of Ruffo are not equivalent to Applicant's "transition zones", the Examiner respectfully argues the contrary. The Applicant has defined the transition zone in claim 1 as comprising fibers from the first and second strata (or second and third strata) commingled substantially uniformly across the composite's width and length. These requirements have been met by Ruffo regardless of the process which the Applicant uses to create the composite. It is suggested by the Examiner to further articulate the nature of the transition zones to differentiate it from the prior art product.

#### Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Boyd

May 20, 2004

Ula Luddock
Ula C. Ruddock
Primary Examiner

Tech Center 1700